

WHAT IS CLAIMED IS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A support element for an extracorporeal fluid transport line, comprising:

[[-]] a first and a second lateral portion ~~{20, 22}~~ designed to hold corresponding portions of the transport line ~~{2}~~ to delimit at least a first length of tubing ~~{18}~~; and

[[-]] a rigid cross-piece ~~{23}~~ for connecting the lateral portions ~~{20, 22}~~;

~~characterised in that~~ wherein the first lateral portion ~~{20}~~ incorporates a continuous fluid separator ~~{10}~~ capable of separating fluid into a gaseous portion and a liquid portion.

2. (Currently Amended) The element of ~~Claim~~ claim 1, ~~characterised in that~~ wherein the separator ~~{10}~~ comprises a containing body ~~{11}~~ having:

[[-]] at least one inlet ~~{12}~~ for receiving a fluid;

[[-]] at least a first outlet ~~{13}~~ for receiving a liquid portion of the said fluid;

[[-]] selector means ~~{15}~~ interposed between the said inlet ~~{12}~~ and the said first outlet ~~{13}~~ and capable of continuously separating fluid into a gaseous portion and a liquid portion.

3. (Currently Amended) The element of ~~Claim~~ claim 2, ~~characterised in that~~ wherein the said containing body ~~{11}~~ of the said separator comprises at least a second outlet ~~{14}~~ for receiving the gaseous portion of the said fluid.

4. (Currently Amended) The element of ~~Claim~~ claim 2 ~~or 3~~, characterised in that the wherein said selector means ~~(15) comprise~~ comprises at least one hydrophilic membrane ~~(16)~~ having one side ~~(16a)~~ facing the said first outlet ~~(13)~~ and one side ~~(16b)~~ facing the said at least one inlet ~~(12)~~, for receiving the said fluid and transferring only liquid towards the said first outlet ~~(13)~~.

5. (Currently Amended) The element of ~~Claim~~ claim 3 ~~or 4~~, characterised in that the wherein said selector means ~~(15) comprise~~ comprises at least one hydrophobic membrane ~~(17)~~ having one side ~~(16a)~~ facing the said second outlet ~~(14)~~ and one side ~~(17b)~~ facing the said inlet ~~(12)~~, for receiving the said fluid and transferring only gas towards the said second outlet ~~(14)~~.

6. (Currently Amended) The element of ~~any one of Claim~~ claim 1 ~~or 5~~, characterised in that the wherein said first length of tubing ~~(18)~~ has a curved shape and a specified axial extension.

7. (Currently Amended) The element of ~~any one of Claims~~ claim 1 ~~to 6~~, characterised in that the wherein said second lateral portion ~~(22)~~ has a tubular profile and is designed to receive one end of the said first length of tubing ~~(18)~~ and one end of a second length of tubing ~~(19)~~, which are fixed in this said second lateral portion.

8. (Currently Amended) The element of ~~any one of Claims~~ claim 5 ~~to 7~~, characterised in that the wherein said containing body ~~(11)~~ comprises a base ~~(25)~~ and a cover portion ~~(26)~~, interacting with each other to form a passage ~~(27)~~ for fluid between the said inlet ~~(12)~~ and the said first and second outlets ~~(13 and 14)~~.

9. (Currently Amended) The element of ~~Claim~~ claim 8, characterised in that the wherein said base ~~(25)~~ forms a through channel ~~(28)~~ for putting the said passage ~~(27)~~ into fluid communication with the an exterior, the said hydrophobic membrane ~~(17)~~ operating in the said channel.

10. (Currently Amended) The element of ~~Claim~~ claim 8, ~~or 9, characterised in that the~~ wherein said base (25) comprises an incorporated first tubular connecting element ~~(29)~~.

11. (Currently Amended) The element of ~~Claim~~ claim 10, ~~characterised in that the~~ wherein said cover portion comprises an incorporated second tubular connecting element (30) having an axis of extension inclined with respect to that of the said first tubular connecting element ~~(29)~~.

12. (Currently Amended) The element of ~~any one of Claims 8 to 11,~~ characterised in that the claim 8, wherein said hydrophilic membrane (16) is interposed between the said base (25) and the said cover portion ~~(26)~~, and extends essentially throughout the said containing body ~~(11)~~.

13. (Currently Amended) The element of ~~any one of Claims 8 to 12,~~ characterised in that claim 8, wherein each of the said base (25) and the said cover portion (26) ~~comprises a~~ comprises corresponding base wall walls (25a, 26a) and a corresponding perimeter edge edges ~~(25b, 26b)~~ emerging from the said base wall walls, the said hydrophilic membrane (16) extending parallel to the said base walls (25a, 26a) in a position separated from ~~them~~ said base walls.

14. (Currently Amended) The element of ~~Claim~~ claim 13, ~~characterised in that the~~ wherein said containing body has a plurality of projections (31) emerging from the said base wall (25a) of the said base.

15. (Currently Amended) The element of ~~Claim~~ claim 13, ~~or 14, characterised in that the~~ wherein said containing body has a plurality of projections (32) emerging from the said base wall (26a) of the said cover portion.

16. (Currently Amended) The element of ~~Claim~~ claim 14, ~~or 15,~~ characterised ~~in that the~~ wherein said base projections ~~(31)~~ comprise teeth distributed uniformly over a surface of the said base wall ~~(25a)~~ of the said base.

17. (Currently Amended) The element of ~~Claim~~ claim 15, ~~or 16,~~ characterised ~~in that the~~ wherein said cover portion projections ~~(32)~~ comprise deflectors spaced angularly to guide the flow of liquid towards the said first outlet ~~(13)~~.

18. (Currently Amended) The element of ~~any One of Claims 8 to 17,~~ characterised ~~in that the~~ claim 8, wherein said base ~~(25)~~ of the said containing body, the said rigid cross-piece ~~(23)~~ and the said second lateral portion ~~(22)~~ are made in a single piece.

19. (Currently Amended) The element of ~~any one of Claims 1 to 18,~~ characterised ~~in that the~~ claim 1, wherein said rigid cross-piece ~~(23)~~ is essentially flat and parallel to a plane in which the said first length of tubing ~~(18)~~ lies.

20. (Currently Amended) The element of ~~any one of the preceding claims,~~ characterised ~~in that the~~ claim 1, wherein said continuous fluid separator ~~(10)~~ incorporates at least one check valve ~~(36)~~ predisposed to prevent a flow in the said transport line ~~(2)~~ which is inverse to a desired transport direction.

21. (Currently Amended) The element of ~~Claim~~ claim 20, characterised ~~in that the~~ wherein said check valve ~~(36)~~ is predisposed along a pathway of the said liquid portion, after the said liquid portion has been separated from the said gaseous portion by the said fluid separator ~~(10)~~.

22. (Currently Amended) The element of ~~Claim~~ claim 21, ~~and of claim 2,~~ characterised ~~in that the~~ said check valve ~~(36)~~ is arranged internally of the said containing body ~~(11)~~ in a zone comprised between the said selector means ~~(15)~~ and the said first outlet ~~(13)~~ wherein the separator comprises a containing body having:

at least one inlet for receiving a fluid;

at least a first outlet for receiving a liquid portion of said fluid;

selector means interposed between said inlet and said first outlet and capable of continuously separating fluid into a gaseous portion and a liquid portion,

and wherein said check valve is arranged internally of said containing body in a zone comprised between said selector means and said first outlet.

23. (Currently Amended) The element of ~~any of claims from 20 to 22,~~
~~characterised in that the~~ claim 20, wherein said check valve (36) comprises a mobile obturator organ, (37), which operates on a passage mouth (35) of ~~the~~ said liquid portion.

24. (Currently Amended) The device of ~~Claim claim~~ claim 23, ~~and of claim 8,~~
~~characterised in that the~~ wherein said containing body comprises a base and a cover portion, interacting with each other to form a passage for fluid between said inlet and said first and second outlets, said passage mouth (35) is being associated with ~~to the~~ said cover portion (26) of ~~the~~ said containing body (11).

25. (Currently Amended) The element of ~~Claim claim~~ claim 24, ~~characterised in that the~~ wherein said selector means comprises at least one hydrophilic membrane (16) facing and distanced from a base wall (26a) of ~~the~~ said cover portion, (26), ~~the~~ said passage mouth (35) being associated with ~~to the~~ said base wall (26a).

26. (Currently Amended) The element of ~~any one of preceding claims from 5 to 25,~~ ~~characterised in that the~~ claim 5, wherein said containing body (11) internally defines a fluid passage (27) between said separator inlet (12) and ~~the~~ said first outlet, (13), the said hydrophobic membrane (17) being situated in an upper zone of a fluid passage portion (27a) located upstream of ~~the~~ said hydrophilic membrane, (16), ~~the~~ said hydrophobic membrane (17) facing upwards, with reference to a use configuration

of the said support element, (1), in which configuration the said first length of tubing has a vertical lie plane.

27. (Currently Amended) The element of ~~Claim~~ claim 26, ~~characterised in that the wherein~~ said upstream passage portion (27a) for passage of fluid has at least one passage section which increases in a direction towards the said hydrophobic membrane (17).

28. (Currently Amended) The element of ~~Claim~~ claim 26, ~~or 27, characterised in that the wherein~~ said hydrophobic membrane (17) is located superiorly with respect to an upper point of the operative surface of the said hydrophilic membrane (16).

29. (Currently Amended) The element of ~~any one of claims from 2 to 28, characterised in that the claim 2, wherein~~ said containing body (14) has a development which is prevalently in a transversal direction proceeding from the said first lateral portion (20) to the said second lateral portion, (22), the said first outlet (13) being located in a lateral end zone of the said transversal development, in proximity of the said second lateral portion (22).

30. (Currently Amended) The element of ~~Claim~~ claim 29, ~~characterised in that the wherein~~ said second outlet (14) is arranged in an intermediate zone of the said transversal development.

31. (Currently Amended) The element of ~~any one of claims from 4 to 30, characterised in that the claim 4, wherein~~ said hydrophilic membrane (17) has a vertical lie plane, with reference to a use configuration in which the said first length of tubing (18) has a vertical lie plane.

32. (Currently Amended) A gas-liquid separator (10), comprising:

a containing body (11) having at least one inlet (12) for receiving a fluid and at least a first outlet (13) for receiving a liquid portion of the said fluid, the said containing body (11) affording internally thereof a fluid passage (27) between the said at least one inlet (12) and the said first outlet (13);

at least one filtering element (16) arranged internally of the said fluid passage (27) having a side (16a) which faces the said at first outlet (13), and a side (16b) which faces the said at least one inlet (12), for receiving the said fluid and transferring only liquid towards the said first outlet (13), dividing the said fluid passage (27) into an upstream portion (27a) thereof, situated between the said at least one inlet (12) and the said filtering element (16), and a downstream portion (27b) thereof situated between the said filtering element (16) and the said first outlet (13);

at least a second outlet (14), being a vent, operatively associated with to the said upstream portion (27a) of the said fluid passage (27), for receiving a gaseous portion of the said fluid.

33. (Currently Amended) The separator of Claim claim 32, characterised in that the wherein said at least said second outlet (14) is situated in an upper zone of the said upstream portion (27a) of the said fluid passage, (27), upper meaning in with reference to a use configuration of the said separator (10).

34. (Currently Amended) The separator of Claim claim 33, characterised in that wherein at least a part of the said upstream portion (27a) of the said fluid passage has a passage section which increases gradually in an upwards direction, with reference to a use configuration thereof of said separator.

35. (Currently Amended) The separator of Claim claim 33, or 34, characterised in that the wherein said filtering element (16) is hydrophilic, and flat, with a lie plane arranged vertically, with reference to a use configuration thereof of said separator.

36. (Currently Amended) The separator of ~~any one of claims from 32 to 35,~~claim 32, further comprising a hydrophobic element (17) operating on the said second outlet, (14), ~~the said filtering element (16) and the said hydrophobic element (17) being flat and having lie planes arranged one transversally with respect to another.~~

37. (Currently Amended) The separator of ~~any one of claims from 33 to 36,~~characterised in that the claim 33, wherein said at least one fluid inlet is arranged in a lower zone of the said upstream portion (27a) of the said fluid passage, (27), with reference to a use configuration ~~thereof~~ of said separator.

38. (Currently Amended) The separator of ~~any one of claims from 32 to 37,~~characterised in that the claim 32, wherein said containing body (11) comprises at least two base walls, (25a and 26a), which delimit the said fluid passage and which face opposite sides (16b and 16a) of the said filtering element, (16), ~~the said filtering element being distanced from the said base walls, (25a and 26a), a plurality of projections (31 and 32) emerging from the said base walls (25a and 26a) defining two rest planes for said opposite sides (16b and 16a) of the said filtering element (16).~~

39. (Currently Amended) An infusion line comprising a support element (1) ~~according to any one of the preceding claims.~~claim 1.

40. (Currently Amended) The infusion line of Claim 39, comprising:

a container (4) of a liquid to be infused into a patient;

a second length of tubing (19) extending between the said container and the said rigid support element (1) and being placed in fluid communication with the said first length of tubing (18).